THE CLINIQUE.

VOL. XVIII.] CHICAGO, SEPTEMBER 15, 1897. [No. 9.

Original Lectures.

GUNSHOT WOUNDS AND THEIR TREATMENT.

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PART I.

The most interesting feature of gunshot wounds is, that most freshly made ones, are aseptic. As Esmarch says: "The damage done by a bullet is in its passage, the harm that is added comes mostly from the examiner's probe or fingers." The main object of the present paper is to emphasize these truths and to outline a plan of treatment which will tend to do away with injudicious manipulation of shot wounds. It seems a very difficult lesson to learn that in most cases a bullet is like any other aseptic foreign body and may remain buried in tissues almost indefinitely without special harm. Before taking up the treatment, however, or describing the conditions in which exploration is necessary, let us take a brief glance at the general characteristics of shot wounds, and the conditions which influence them. Our subject shall be limited to the wounds inflicted by small arms, they being the most common in civil practice.

While essentially a combination of punctured and lacerated wounds, shot wounds may have the characteristics of a simple contusion or of an incised wound. As

met with in civil practice they vary from simple contusions to frightful lacerations, the character being influenced by the size, shape and velocity of the missile; the distance from which the shot is fired; the location of the injury and the plane at which it strikes the body. The influence exerted by the size is too obvious to demand explanation. The form of the ball is of very great importance and by its form we mean not only the original shape but the change which it may have undergone from its contact with intervening bodies. Most of the bullets of the present day are conical in shape and the course being far more steady it is less frequently deviated than the old round balls. The pointed apex, the rotary motion and the great velocity enables a conical ball to pierce tissues with more ease, and while the wound of entrance may appear smaller, the internal destruction is far greater than that inflicted by round balls. When lead balls have come in contact with hard substances, they are sometimes rendered peculiarly distorted and lacerate the tissues just in proportion to their irregularities. At close quarters and in direct injuries the difference in the form of the ball makes less difference, the greatest danger being the entrance of clothing, wadding or powder. Speaking in a general way, the shorter the range the more pronounced the external laceration. The position occupied by the patient at the time of the reception of the injury should be considered in connection with the velocity of the ball and the distance at which the shot was fired because, depending upon this position a ball may travel through several parts of the body and thus give evidence that numerous shots have been fired. It must be borne in mind also in this connection that while a conical ball at full speed will destroy and pass through all human tissues, those of less speed (and round balls) may be deviated from their course by a projection of bone or a contracted tendon. These may likewise cause a splitting of the ball into fragments, in which case we may have but one wound of entrance and several of exit. Before describing the objects of

attainment in an examination of shot wound, it may be well to describe a typical appearance of the wounds of entrance and of exit. The wound of entrance in a direct injury where the ball strikes squarely, is usually round or stellate in form, about the size of or slightly smaller than the missile, the edges being darkened and inverted. The wound of exit is commonly larger than that of entrance, more irregular with everted edges and showing less contusion but more laceration. We have already seen the conditions which may entirely change these characteristics.

Diagnosis and examination. The diagnosis of shot wounds is usually made for us though there may be difficulty in determining whether one or more shots was fired. If we bear in mind, however, the general characteristics of the entrance and exit wounds and the conditions which modify them it will not usually be difficult to determine this point. The examination should be conducted with the view to determining first, the presence of foreign bodies. If the wound of entrance is smaller or only slightly larger than the missile; if the edges are inverted and no more lacerated than the distance, the form and size of the missile would seem to warrant; if the clothing over the seat of injury is perforated but not torn, and there are no shreds of clothing or wadding in sight, one would be pretty positive that no foreign body other than the ball had gained entrance. Second, the lodgment of the ball. This can as a rule be determined by the presence or absence of a wound of exit. Probing is entirely unnecessary. If there is more than one wound of exit one cannot always be positive, for you cannot know for certain into how many pieces the ball may have divided. Third, the organs and tissues involved in the injury. If you can determine the position of the patient at the time of accident, the distance and direction from which the ball was fired, the force of the weapon and the nature of the ball, the probable course of the missile can be outlined. With this information, the sensations of the patient and the objective symp-

toms, will enable one to decide with tolerable accuracy what tissues are injured. The extent of such injury can better be determined by the general symptoms.

Symptoms and prognosis. The symptoms to which the greatest attention should be paid, I mean the primary ones, are shock and hæmorrhage. Shock is more grave and persistent when unattended by severe hæmorrhage in wounds of the abdomen than in wounds of any other part of the body. Indeed, cases have been reported where slight contusions of the abdomen have produced profound and even fatal shock. The mental condition of the patient at the time of receiving the injury, must largely influence this degree of shock, for I have seen cases with multiple perforations of the intestine retaining normal pulse and temperature, while others with simple flesh wounds have been in most profound collapse. The degree of subnormal temperature in these cases is of strong prognostic value. It is not infrequent to find the temperature 96° F. or below. If it remain so for any length of time, no matter what the injury, the prognosis is grave. Fatal primary hæmorrhage is not so frequent as one would suppose. The contusion, the torsion caused by the rotation of the ball and syncope in severe cases are all good hemostatics and seem to control bleeding from vessels of ordinary size. Hæmorrhage proves, of course, rapidly fatal when large vessels are severed and should be regarded as one of the greatest dangers. What may seem a slight flow during the period of shock may prove very serious during reaction. The secondary symptoms are those which follow the reaction. They include all conditions from simple surgical fever to the worst forms of infective surgical diseases and from simple traumatic inflammation to gangrene. We shall dismiss this part of our subject as all of these infections should be treated on general principles, if they cannot be prevented by perfect cleanliness at first examination. Speaking in a general way, the rate of mortality increases in proximity to the trunk. Injuries to the

brain and spinal cord and perforations of abdominal and thoracic cavities, are always grave.

Treatment. The undue importance which has been attached to the early removal of the missile by the laity and which the misdirected judgment of the majority of physicians still fosters, is the greatest stumbling block to successful treatment. The simple presence of the ball is no indication for its removal nor is it even an indication for probing.

I feel like once more emphasizing the great truth that the majority of freshly made shot wounds are aseptic to begin with. Do not, I beg of you, infect them by injudicious manipulation. Excluding the penetration of cavities, there are in reality but five conditions which render exploration, either with fingers or probes, justifiable. These are: First, a large wound which has been freely exposed to atmospheric influences; second, the presence of foreign bodies others than the ball; third previous examinations without antiseptic precautions; fourth, extensive injury to large vessels, nerves or bone; fifth, infective inflammations already begun. In simple flesh wounds, either penetrating or perforating, when you see your patient soon after the accident, when no one else has yet examined him, when there is no marked hæmorrhage or anæsthesia present, thoroughly cleanse the surrounding parts the same as for any antiseptic operation, fill both wounds or all wounds carefully with iodoform or some dry dusting powder, apply a dry dressing and put the patient to bed, the injured part at absolute rest. It is well to bear in mind the possibility of infecting your wound during this cleansing process so it is always best before beginning the scrubbing either to fill the wounds up with a dry powder or to gently pack them with a carbolized or mercuric gauze. This can be removed after the preparation and the extra precaution of a cleansing with hydrozone taken.

If, however, your patient was shot several hours before, if the wound is large and markedly lacerated, if the clothing at the site of the injury was torn and small shreds

could be detected in the wound, if the attending physician has been poking around for the ball for the last few hours, or if you have reason to suspect an injury to large vessels and nerves, give your patient an anæsthetic, prepare the part for an antiseptic operation and if the wound be in an extremity, apply a constrictor above the injury. Follow that bullet track with a probe and scalpel, making your incision sufficiently large to see what you are about. The finger, if surgically clean, is the best probe always. Remove all particles of dirt, clothing, wadding or any other foreign bodies, irrigating meanwhile either with a mild antiseptic solution or a sterilized normal salt solution. Examine the main blood vessels carefully, and if the artery is wounded ligate above and below and cut the vessel between the ligatures. If the vein is injured you must use your judgment in the individual case whether lateral ligature or suture would be preferable to double ligation and section. Stitch together the ends of injured nerves after careful removal of any hopelessly injured portions. After being sure of the thorough removal of all foreign matter including tissues traumatized beyond hope of recovery, the parts should be thoroughly cleansed with hydrozone and later irrigated with an antiseptic solution, preferably a 10 per cent solution of iodine.

The question of sutures is one of very great importance. My own practice is that if traumatism is very great, sutures should never be used. When there is a prospect of perfect regeneration of tissues which are only slightly traumatized, I introduce sutures but do not tie them, but pack the wound carefully with iodoform gauze for twenty-four or forty-eight hours to give the tissues every advantage without the tension of sutures. If upon second dressing the tissues look healthy, the sutures are tightened thus getting union by the method of secondary suture.

Should suppuration occur either before or after secondary suture, the only treatment is the establishment of perfect drainage. My experience has been that this care to avoid tension of damaged tissues gives us the least likeli-

hood to suppurative inflammation. Badly traumatized tissues united by primary suture will, in the majority of cases, suppurate even after the most stringent measures of surgical cleanliness.

Injuries of bone vary from simple fractures to the worst cases of compound comminuted fractures. Simple fractures should be treated on general principles. Compound fractures not markedly comminuted should be treated on general principles outlined in the treatment of the wounds of soft parts in addition to carefuly splinting. When the bone is badly comminuted, operation is demanded. To avoid repetition I shall simply enumerate the main objects of attainment in the treatment. First, thorough antiseptic cleanliness; second, the removal of foreign bodies and detached splinters of bone; third, perfect remolding of fragments after removing sharp projections and irregularities with bone forceps, holding the opposing surfaces in contact with pins or sutures; fourth, establishing adequate drainage, usually by leaving the wound open (this will of course depend upon the extent of the traumatism of the soft parts); fifth, an abundant, antiseptic and absorbent dressing; sixth, the careful application of splints supported by plaster of Paris to maintain apposition and immobilization. Extensive comminution of bone when complicated with serious injury to blood vessels or nerves of an extremity, will of course demand amputation. Other conditions which may demand amputation are gangrene, whether simple from cutting off of the blood supply or the acute, traumatic, spreading gangrene; acute infectious osteomyelitis developing from the points of comminution. In amputating after a shot injury, the same precaution is necessary as after machinery accidents, namely, remember the tissues are damaged far beyond what at first sight seems to be the limitation, so amputate sufficiently high to be sure that your flaps are in healthy, unhurt tissues.

THE NERVOUS PHASE OF ASTHMA.

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In the pleiades of thoracic affections, none is so proteiform, so rich in variety of phenomenal manifestations, so puzzling in the scope of its etiological connections, as the one commonly called asthma. Of course, if we only view the majority of the subjects as they come to us, especially when the trouble is of old standing, the clearness of the early clinical outline is blurred by subsequent pathological accretions, entailing more or less disruption of the respiratory and the cardiac functions. Here we have no longer to do with a definite syndrom, and it often requires an experienced eye to discern its pristine features under the heterogeneous growth of organic and functional disorders behind which it lies hidden. Still in the midst of the motley crowd of asthmatic modalities, one typical form stands out in bold relief, a form already recognized by ancient observers, and familiar to Greek, Roman and Arabian physicians alike, a form which was given a suggestive, and, to our mind a most correct name, "asthma convulsivum." It now goes by the appellation of "essential asthma."

Maintaining himself on the solid ground of physiological pathology and clinical observation, the writer intends to show that asthma possesses all the characteristics of an authentic genuine neurosis.

To begin with, we adopt in its entirety, Brissaud's definition. It runs thus: "Asthma is a neurosis consisting in crises of spasmodic dyspnœa, most of the time accompanied by vaso-secretory disturbances of the mucosa of the aerial passages."

If we survey for a moment the data offered to our study by the latest results in physiological pathology, we see that they ultimately rest upon 1, pathological anatomy, 2, experimentation. What does pathological anatomy show? Nothing. It returns a verdict of not guilty all along the line. And no wonder, since true, unsophisticated asthma is really an affection "sine materia;" and we should bear in mind, once for all, that it is totally distinct from the many forms of pseudo-asthma, or symto-

*Presented to the American Institute of Homœopathy, Buffalo, N. Y., June, 1897.

matic asthma, or dyspnœic syndroms depending upon various pathological conditions and recognized lesions. This negative answer, therefore, is no more than it should be, just as in the case of "essential epilepsy."

Now as to experimentation. Here we see that the notions gleaned in that field, with reference to man, hardly point to a few external circumstances favorable to the development of dyspnœic accidents; whereas the few relevant experiments practiced upon animals teach us positively nothing as to the inner conditions which prepare the phenomenon.

In this task of unraveling the mode of production of the dyspnœic attacks we are therefore mainly thrown back upon our reasoning powers. We may by inference conceive of two influences at work, viz., paralysis and excitation. The paralytic hypothesis hardly affords a satisfactory explanation of the dyspnœic outburst, if we remember the effects of the section of the vagus upon the lung. What do we see? A notable slowing up of the respiratory rhythm, without any particular dyspnœa. Moreover, we note 1, an anxious and deep inspiration; 2, a short expiration, two features that are exactly the reverse of what we observe in asthma.

The hypothesis of excitation is more plausible, but there are two ways of understanding it, according as we invoke a centrifugal or a centripetal origin. We easily conceive how a stimulus bearing upon the respiratory centre in the medulla may start along the vagus an irritative wave, causing the spastic contraction of the bronchial muscles of Reisseissen, thus bringing about an obstruction to the penetration of air. But we should not lose sight of the fact that experimental irritation of the peripheral end of the vagus, after section, creates no particular bronchial spasm.

If we turn to the centripetal theory, a very simple analysis will show us how an irritation may start from the terminal twigs of the vagus, impress the "vital knot," wherefrom the incitation is carried to the cord, to the phrenic nerves, to the intercostal nerves, etc. Hence will readily arise tetaniform inspiration and forcible distention of the thorax, and when the reaction sets in, the result of nervous and muscular exhaustion, the natural elasticity of the lung will slowly regain its lost ground.

Then also appear the catarrhal symptoms as a consequence of the transitory paralysis of the vagus, presumably

a vaso-dilatory paralysis. For if the catarrh were the result of a primary incitation of the secretory filaments of the vagus, it ought to be a constant feature of the asthmatic attack, and to show itself at the beginning of the attack, which is not the case.

From a purely physiological standpoint, it is a matter of daily observation that a large variety of peripheral or central incitations (cutaneous, pulmonary, intestinal in the first case, emotive in the second) are apt to cause modifications in the bulbar respiratory centre that in turn influence the vagus, which through its pulmonary branches modifies the respiratory rhythm.

We are therefore driven to the conclusion that any abnormal source of irritation, impinging with sufficient force upon the medulla oblongata, and particularly the nuclei of origin of the vagus, will precipitate an attack of paroxystic dyspnœa. In fact, the above nuclei may be considered as the substratum of all asthmatic manifestations, as the centre of the nervous reflex upon which they depend.

Now, let us take up the neurosis itself and dissect it carefully, from a clinical point of view. What do we observe? Paroxystic, frequently periodical crises, setting in abruptly, or preceded by an aura, or sundry prodromic symptoms; abnormal respiratory sensations; urgent need of breathing (dyspnœa); peculiar attitudes of the body; contraction of the respiratory muscles, with elongation of the thorax: reversed respiratory rhythm (expiration two or three times longer than inspiration); distention of air cells, cough, expectoration, etc.; all phenomena that are part and parcel of the crisis of the nervous storm in the medulla.

One thing strikes us at first in the survey of the clinical behavior of asthma, and that is the remarkable rhythm of the storm, its recurrence, duly registered by a majority of the sufferers, almost at the same minute in its chronometric precision. This periodicity, which savors strangely of epilepsy, is in itself perhaps the strongest argument in favor of the nervous origin of this affection.

Another clinical feature of paramount importance is the suddenness of the onset, the abrupt passage from a state of health to a state of disease. This trait is common to all neuroses. We find it in angina pectoris, in facial convulsive tic, in epilepsy, etc. All the affections of this class bow to the same law of apparent fatality.

It frequently occurs that an attack of asthma is pre-

ceded by premonitory signs, with which the patients soon become familiar. These impressions are usually of a fugitive, vague, indefinite character, but nevertheless profoundly felt, and always the same in each particular case. Some patients will describe the impression as a peculiar taste of the saliva during the evening meal; another as a feeling of weight about the stomach; others will exude an unpleasant odor; others yet evince a marked change of temper, or will complain of various unpleasant sensations about the body. Now, what are these premonitory impressions but a regular *aura*, in no way differing from the various forms of aura, sensorial, visceral or sensory that will herald the advent of a fit of epilepsy? The writer has seen a case in which there were crises of asthma alternating regularly with spells of migraine. The attack of asthma was announced by a peculiar taste in the mouth (gustatory aura), while the migraine was preceded by many colored flashes of light before the eyes (visual aura.) We consider that one aura is just as good as another, and bold would the clinician be who would deny the auric character of the premonitory signs of asthma. Even the chemical aura, described by Thorion, as preceding the epileptic crisis in some cases, has been observed also in cases of asthma. By chemical aura is meant here an abundant discharge of some urinary elements, preparatory to the attacks. Likewise, marking the end of the asthmatic crisis, what do we frequently observe? An abundant emission of clear urine, such as we should expect after a spell of hysteria, for instance, and to pursue the analogy, we see that the discharge is generally followed by a deep sleep, not unlike that which closes a fit of epilepsy.

Another trait of comparison, and not one of the least interesting, between asthma and epilepsy, is the frequent occurrence of the attacks during the night. And it is certainly very suggestive that no less an authority than Féré should state that "it is reasonable to suppose that the hallucinations during sleep bear some relation to the frequency of nocturnal attacks in certain patients."

Glancing now over some clinical varieties of asthma, we will find many points of similarity between this affection and other neuroses. Let us consider for a moment those cases in which the symptoms drag along for a few days, constituting a regular "status asthmaticus." Here, instead of a permanent dyspnœa, we have remissions followed by paroxysms, similar to those observed in the condition know as the "status epilepticus."

We would also call particular attention to an interesting modality of asthma, in which there is an incompleteness of the attack, which brings vividly to the mind what is known as the "petit mal." In these abortive cases, there is no participation whatever of the inspiratory muscles. The trouble seems to spend itself on the bronchial muscles. There is moderate dyspnœa, of short duration, without any exterior effort, or contraction of the diaphragm; the respiratory rhythm is hardly disturbed, and were it not for the presence of some sibilant râles in the chest, the crisis might easily be mistaken for something else.

By way of opposition, we may point out cases where convulsive phenomena of a similar order, but belonging to other nervous spheres, predominate. Cases are encountered of so-called glottic spasm, that may be rightly considered as a form of "internal convulsion," consisting of a glottic aura with sudden loss of consciousness, and which Charcot designated as "ictus laryngé" This ictus oftentimes resolves itself into an attack of asthma. There is more. A regular epileptic attack has been observed to follow, under similar circumstances. This superadded syndrom may therefore be considered as the superlative expression of a permanent condition of spasm, by which the respiratory muscles were alone at first affected. The laws of Pflüger on the propagation and generalization of partial epileptoid convulsions appear, therefore, to be applicable to the "asthma convulsivum."

We may now devote a few lines to the peculiar affinity subsisting between asthma and the functional variety of angina pectoris. It is not so long ago that the latter affection was called pneumonalgia, painful asthma. And verily, these names expressed in a way the reality of things; for there are, beyond the peradventure of a doubt, hybrid clinical forms showing themselves alternately, now under the garb of angina, then under that of asthma, or gradually shading off into one another. Franck, Trousseau, Anstie, and scores of lesser lights have related undeniable cases in support of this view. Owing to the puzzling shiftiness of this clinical type, many a case of asthma must be mistaken for angina, and vice versa. It took Forbes' acumen to bestow upon the mental element of anguish in angina the dignity which properly belongs to it. Now, we have cases of masked asthma in which this mental feature constitutes almost the whole attack. As Jaccoud puts it, "Those patients fear suffocation, while

their breathing is hardly disturbed." Such cases could be described as "spells of respiratory anxiety in which the dyspnœa is the least factor." Therefore, whenever we meet with simple breathing anxiety by itself, without angina, without dyspnœa or catarrh, we may legitimately assume that we have to deal with a *masked form of asthma.* We should call it "mental asthma;" and it appears to us to nearly correspond to that peculiar distress described by Franck, as observed in animals whose vagus is irritated, under experiment. We might, if necessary, push this plea very much farther, and show from the remarkable cases published by Griesinger, Clouston, Graves, Salter, Eulenburg, Anstie, etc., the close relationship that exists between asthma and the most varied clinical forms of neurosis, such as epilepsy, sciatica, angina, "tic douloureux" and especially migraine.

The subject of migraine alone in relation to asthma would require a volume to do it justice. And what an instructive and curious chapter could be written upon the uncanny affinity that such trustworthy observers as Trousseau, Kelp, Savage, Conolly-Norman have discovered between asthma and mental alienation! For it is not simple hypochondria that such an affinity implies, but some of those asthmatic sufferers are seen to drift into the worst and most unpromising forms of insanity. Enough has been adduced, perhaps, to establish the essentially neurotic character of asthma, and to justify the ingenious metaphor used centuries ago by Avicenna, and repeated since then by Cullen, Bretonneau: "Asthma is the epilepsy of the lungs." However, before closing his remarks upon the nervous phase of asthma, the writer feels impelled to say something about the etiology of the neurosis itself. Aside from the rare cases in which there exists a central source of irritation (tumors of the medulla), or when an enlarged tubercular bronchial gland presses upon the trunk of the vagus, many are the instances where the medulla is acted upon by peripheral stimuli arising from various visceral sources, also from local irritations all along the aerial passages, nose, pharynx, larynx, bronchi, with the nerve terminations of the vagus or of the trigeminus as points of origin.

We may also conceive that a subject tainted or not by asthmatic predisposition may show attacks of asthma under the influence of some blood alterations, in the course of some forms of albuminuria, when the serum becomes loaded with toxic products.

This opens the door to the consideration of a less concrete but not less real and much wider etiological factor. We mean the humoral alterations of the system at large, of the diathetic influences. No unprejudiced mind can ignore or deny certain constitutional states in the course of which asthma may appear as a primary manifestation, or in which the disappearance of some morbid functional state is followed by the bursting forth of an attack of asthma. Such are the cases known as dartrous, gouty, rheumatic and metastatic.

However little inclination one may feel toward pathological generalization, unbiased clinical observation, which is the only true guide of the practitioner, will soon convince us that some hidden, all-powerful influence is at work behind the outward asthmatic syndrom.

No matter how we may look upon an attack of asthma, no one can deny that it possesses one dominant feature, viz.: the paroxysm, which is transitory. And back of that explosion we must necessarily admit of a constitutional predisposition, which is permanent.

We will call it the *neuro arthritic diathesis*.

The writer believes that there is a tinge, more or less pronounced, of arthritism in almost every form of neurosis, and particularly so in the case of asthma. Without going to the length of seeing, with Haig, a "uric acid storm" in almost every asthmatic attack, we are convinced that many a paroxysm may be due to a process of autointoxication. At all events, no sane man will deny, with the clinical and experimental data now at hand, that the presence in the blood of toxic products, the result of vitiated metabolism (uric acid, xanthin bases) may and will oftentimes constitute the efficient cause, or a strong incentive for the production of various forms of nervous paroxystic suffering, be it migraine, epilepsy, angina pectoris, or asthma.

Mindful of the above conclusions, the thoughtful practitioner will do well to rely much more on hygiene and dietetics than on his materia medica. He will see that his patients, neurotic or otherwise, cut off the habitual excess of proteids, butcher-meat especially, from their daily diet; that they practice deep nasal breathing, that they take plenty of exercise in the open air, and that nothing that is rational and practicable is left undone with a view to checking the baneful influence of that insidious and ubiquitous morbid factor, *retarded nutrition*, which lies at the root of a large share of human suffering.

Clinical Society Transactions.

CORNELIA S. STETTLER, M. D., Corresponding Secretary.
ORRIN L. SMITH, M. D., Recording Secretary.

AUGUST MEETING, 1897.

The regular monthly meeting was held in the Hahnemann Medical College, August 28, at 8:30 P. M. Dr. E. S. Bailey was chosen Chairman *pro tempore.*

REPORT OF THE SECTION ON DISEASES OF THE NERVOUS SYSTEM.

XLIII. Some of the nervous symptoms of inebriety. By Dr. Katherine B. Clapp.—*Case.* The patient, Harry T., in whom some of the following symptoms have been observed, is forty-six years of age, a coachman and gardener by occupation. Below the medium height, spare physique, florid complexion, the bowed legs telling of rhachitis in childhood and the contour of the head evidencing inferior intellectual qualities. The parents were honest, healthy, temperate country folks. A sister was subject to hysteria, the other sister and the brothers all strong with no bad habits. The patient began the use of intoxicants when but thirteen years of age, he having been persuaded by an uncle to drink whisky as a protection from the cold while camping in the woods. He at first had great repugnance to the taste of liquor, but he soon acquired a strong liking for it, that increased as he grew older.

He says he has had a few attacks of delirium tremens, but there has been no recurrence of them for four years. There is no history of sexual excesses, nor of specific infection. For four years he was happily married; the wife and one child died from typhoid fever, the youngest died while in a convulsion during the teething period. During his married life he was sober and industrious, occasionally taking a glass of beer.

Three years ago he came to my office, and he described his condition as follows: "After my wife died I was so downhearted and discouraged that I began to drink a great deal of whisky, for it seemed to cheer me up and make me feel better. I was obliged to leave my fathers' house on account of my drinking, and after that I never

remained long in one place, for I was constantly longing for change, and my habit made me lose my situation.

"After I had several attacks of delirium tremens I became frightened about myself, and I resolved to quit drinking. I was able to go without liquor for three or four months at a time. Once I abstained from intoxicants for a year; but when I became depressed I had to go for the liquor. For two or three weeks before the craving for drink comes on I feel nervous, and am easily angered; I am sleepless, and afraid of the dark; when asleep I see my dead wife and little ones, and when first awakened if it is dark I still see their ghosts in the room. When I go down the stairs in the morning it seems as though some one followed me; when working in the garden I am in constant fear of something falling on my head. Sometimes I feel tempted to end my life. Then I begin to crave whisky. I fight the craving, but it is of no use to desist. I cannot work; I have no appetite, and frequently there is a running off of the bowels; I cannot sleep, my head aches and there is a buzzing in my ears. The urine is abundant, passing very often, and is light colored like water. (After the attack of alcoholism passes away the urine is dark and scanty.) I dread to be alone; I feel too weak to work; every noise frightens me, and everything seems to go wrong."

While H. is slightly under the influence of alcohol he is light hearted, voluble, talking in a loud, egotistical manner, performing his duties willingly; but when the libations become frequent and stronger he becomes incoherent in his speech, and he acts like any other drunken man, never quarrelsome, but using profane language, losing his temper with his work rather than with persons. There are no bad aftereffects apparent after these sprees except the mental suffering from humiliation. He is penitent, solemnly vowing never to touch another drop. All the distressing hallucinations disappear, also the other nervous trouble described.

Treatment. The first remedy prescribed was nux vomica. The symptoms calling for its use: Furred tongue, pressure in the head, buzzing in the ears and a bruised, aching sensation in the limbs, dreams causing fear; for while inebriety is often associated with a degenerative change in the brain and spinal cord, it more frequently depends upon the nutritive functions of the body; and so this remedy was selected for its usefulness in its action

upon the spinal cord, and also for its profound effect upon the organs of nutrition.

H. seemed to improve under the action of this remedy, and just as I began to think I had performed a wonderful cure he relapsed into his old habit. Then aurum 3 was tried chiefly for the mental condition. Aconite 30, belladonna 3, and lastly zinc val. 3, and with this remedy I have had the best results, for it controls the restlessness, produces sleep and has twice aborted a drunken spree, although I regret to say it has not entirely overcome the desire for liquor.

This case is presented to you, hoping that I may be told of the "ounce of prevention" that is better than the "pound of cure." There are many remedies in our materia medica for the aftereffects of liquor, and a few given for craving for wine or beer. The zinc val. 3 was given for a condition that I think may be called hysterical inebriety.

Discussion: Dr. E. S. Bailey: The emotional or hysterical disorder in the case of inebriety is a new idea to me and one that I can apply to several cases of quite similar character. The time to lock the barn is evidently better before than after the theft. The time that just precedes the drinking bout is evidently better than that of repentance, if it can be obtained, especially when the "touts" are deliberate, the plan being the danger point and the execution a result. I shall look better to these cases for the hint given this evening.

Dr. E. M. Bruce: The type to which this first case belongs is one that interests me very much.

The infinite vagaries of alcoholism, of morphinism, or any other of the peculiar forms of neurasthenia which have their rise in the abuse of some drink or drug, present to the medical man some of the most interesting and tantalizing questions in medicine.

It seems to me too that the profession is very weak and backward in not taking hold of the troubles from a disease standpoint, and basing a mode of treatment therefrom, instead of leaving so much to moral suasion and quacks.

To my mind it is as reasonable to ask a patient with dys-

pepsia to please not eat as to ask one afflicted with alcoholism not to drink when the spell is on him. Some very considerable attention has been given to methods from pulling a victim out of a drinking spell, sobering him up, and putting him on his feet again. But little attention, outside of putting emetics in the grog, has been devoted for a means to ward off the attacks.

Personally I must confess to defeat in most of my efforts. With one case avena sativa was successful if given early enough; in all of the other cases it was a most perfect failure. In another case the tincture of strophanthus in five drop doses four hours apart would abort the attack.

For the awful restlessness which comes on in so many cases when the attack is about over, what is technically known as the "horrors," I have nearly always been successful with the following prescription: Strychnia valerianate, 2x; aurum chloride, 3x. Sig. A one grain tablet of each every two hours.

It seems to ease the restlessness and to promote an appetite within a few hours. This same prescription has been of great service in morphinism and the cigarette "idiotism."

Dr. H. V. HALBERT: I do not feel that I can offer much information relative to the treatment of the liquor habit, though I must say I have had considerable experience in the management of the nervous sequelæ in such cases. It is a question in my mind whether there is any genuine cure, from a medical standpoint, for this terrible habit. I believe in some cases I have succeeded partially though I am not sure that the credit is due to my treatment. If anything is to be done I believe the remedy must create a dislike or a nausea for the stimulant, and the same is true of the opiate and similar habits. I have used tartar emetic and apomorphia for that purpose and I think I have had some favorable results. The tartar emetic I have given with the stimulant in sufficient doses to create vomiting; the apomorphia I have used in the sixth potency long enough to put the stomach in a semi-

nauseated condition until it will tolerate only the simplest food in small quantities. Oftentimes the extreme craving for liquor can be satisfied by the stimulating power of nux vomica, ignatia, or strychnia phos., if it is given frequently enough. When I can get the complete management of a case of this kind I can often perfect a cure by the hypodermic use of strychnia nitrate and the gradual decrease of the intoxicant. This is applicable to the opium and cocaine habit as well. In my clinic I have had some success with a high potency of opium. Unfortunately, however, in those cases we do not have sufficient control of our patients to follow up our treatment.

The nervous phases in this disease are quite formidable and tax our medical ability to the extreme. Yet I believe they are generally curable. The tonic treatment of good food without any stimulant, plenty of rest and freedom from excitement and absolute obedience to the physician will be great adjuvants to the homœopathic remedy. Any drug tonic may establish the old habit. When the liquor habit has been prolonged we get many symptoms of cord paresis; these are mostly in the line of ataxia or neurasthenic weakness. It simply shows that during the periods of continued intoxication the hyperæmia of the mental brain has induced excessive activity of the motor brain; when, therefore the brain suffers from the reaction it requires unusual activity of the sensory cord fibres to create a motor reflex; the afferent tract is thus weakened and a condition of incoördination exists. I think this will explain some of the phenomena in the doctor's case.

Dr. KATHERINE B. CLAPP: The peculiar symptom in the inebriate seems not to have attracted your attention. You will remember I stated all the distressing mental and physical symptoms began before the craving for liquor, disappearing as soon as the whisky was taken and not recurring for several weeks, sometimes not reappearing for three or four months.

XLIV. CATALEPSY WITH A UTERINE FIBROID. BY DR. KATHERINE B. CLAPP.—*Case.* Mrs. L., aged forty-two years,

married twice, childless, family history good, of slight, delicate physique, medium height, sallow complexion, anæmic, fine dark brown hair, expression of the face anxious and troubled. Reflexes normal, is emotional, sheds tears when talking of her condition, suspicious, very susceptible to mental suggestion and so much of a believer in psychosomatiatria that she placed herself under the care of a "mental healer" who bettered the mental condition while harmony prevailed, but when misunderstanding arose the agreeable relationship was disturbed and psychotherapeutics failed.

The patient claims to have enjoyed fairly good health until her twenty-second year, at which time she assumed the entire care of an invalid sister, frequently lifting her to and from the bed. The task was too great for her and she soon began to suffer from painful menstruation and great tenderness and pain in the ovarian region ten days after the flow ceased. Her physician told her "the uterus was displaced and twisted;" he reposited it and endeavored to keep it in position by the use of pessaries; but no uterine support benefited her and she was comfortable only when lying upon her back with the hips elevated. Her physical condition gradually became alarming to her husband and friends, for she began five years ago to exhibit nervous symptoms, called by her physician cataleptic. She was at this time thirty-seven years old; the menses suddenly ceased and the cataleptic (?) attacks became more frequent and of longer duration, being induced by any unusual excitement, fright or disappointment. If the husband did not return at the hour expected, he would be likely when he arrived to fine his wife lying upon the bed or the floor speechless, with arms and legs rigid. When describing his wife's psychoneuroses Mr. L. said these attacks were always less frequent when her environments were pleasant. "Should she have a dispute with Mrs. A. or Mrs. B. there would be one of those cataleptic states *after* the visitors had gone." Once she had a very bad attack when she thought he had lost her pet dog. The husband and wife lived continent lives, for touching the genital tract or pressure upon the ovarian region would produce the hysterical paroxysm. For a while she remained in a well-known sanitarium where she received electrical treatment and massage.

An examination of the uterus after the application of cocaine revealed a fibroid tumor about the size of an ordinary orange in the upper posterior walls of the uterus.

Later a gynæcologist of this city confirmed the diagnosis. Judging that her physical condition was not then such as to withstand an operation for the removal of the fibroid, ergot was given internally, but the stomach refused to retain it and there was nausea and vomiting, with great distress. The ergot was then tried hypodermically, creating such inflamed swellings that it was abandoned. The cataleptic seizures were increasing in frequency and severity, recurring two or three times a week, the patient's physical strength becoming so reduced that she became helpless, unable to feed herself, or to turn in the bed. During these paroxysms she was unable to speak or to move; once while lying in this helpless condition alarmed at the outcries of a delirious patient in an adjoining room, she sprang from her bed she ran down the hall to the house physician's room, told him of her fears, then her arms, legs and neck became rigid and she had to be carried to her bed.

A New York physician when consulted advised the use of the electrical current for the reduction of the tumor.

She received a treatment every day, and he claims that the tumor became much smaller. She had as she expressed it, "felt so dead all through the abdomen." This sensation became lessened, and the cataleptic seizures were farther apart, and after several months she returned to her home and assumed the management of her own household.

The interparoxysmal state was one of extreme nervousness, sensitiveness to heat or cold, and to psychical influences. Headache generally occipital, and a sensation of "something arising from the stomach to the throat." There is constant mental depression and she worries over the most trifling housekeeping difficulties. Six months ago she requested me to give her the electrical current for the tumor which she said had again become large and was giving her great distress by pressing upon the rectum. She dreaded an examination, fearing it would throw her into a cataleptic state, but assuring her that I would desist at the slightest nervous manifestation, I kept her busy relating her symptoms to me while I made an examination of the generative organs and the rectum without arousing the expected hysterical spasm. I found the uterus hard, enlarged, pressing heavily upon the pelvic floor; the cervical os presenting at the os vaginum, the cervical canal stenosed, the parts hot and dry. I could find no hysterogenetic point that could be so called, a spot on the anterior

wall of the rectum being the most tender point. There was no tenderness along the spine, no hyperæsthetic condition of the skin on any part of the body.

To my questions she told me that in none of her attacks had she ever lost consciousness, in fact hearing was more acute than usual, vision is normal and sense of touch, taste and smell seem normal.

The rigid condition of the body was always preceded by a twitching of the muscles. Since her first visit to me six months ago she has had but one of the so called cataleptic attacks. It occurred four weeks ago. She was thrown from her bicycle, receiving but little injury other than the shock, this last attack was slight, lasting only a few minutes.

My patient has received the galvanic current three times a week; the uterus is about one third the size it was when I made the first examination: the vaginal walls are moist, the dryness and heat having disappeared.

The persistent occipital headache is gone, and the mental condition improving. Whenever the patient complains of sleeplessness or nervousness, zinc val. 3x vanishes the symptom. It always has a soothing, pleasing effect upon her, and is the only remedy used to control all nervous phenomena manifested by this patient.

Discussion: Dr. R. Ludlam had enjoyed hearing the report of this case, but could not help thinking, and suggesting that the child was not rightly named. This, of course, was not Dr. Clapp's fault, for she had continued to use the term applied to the trouble before the case came into her hands. The symptoms given were decidedly hysterical, or chiefly so, with perhaps a dash of epileptoid manifestations. They surely were not cataleptic.

Dr. E. S. Bailey: The description of the nervous symptoms accompanying the fibroid tumor, as in the excellent report of Dr. Clapp, is to my mind a very decided advance in analysis, that leads to better nomenclature and better prescribing. It is decidedly in the way of prevention, which sometimes is as good as a cure. As hysteria is better understood, catalepsy seemingly grows more and more rare, as in the case just presented what once was without hesitation pronounced catalepsy, is now cer-

tainly lacking some of the essential characteristics, viz., the entire suspension of the function of the special sense of hearing for one point. The patient is certain that her hearing was never obliterated during a paroxysm, but rather more acute. This does not happen with the cataleptic. I remember Dr. H. B. Fellows' characterization of hysteria, "hysteria is not only a disease but it is a host of diseases." It may be as difficult to remember the possible multiplication of forms as to carry the intricacies of mathematics in one's mind, but more and more does hysteria stamp itself as a disease, and less as a ply of the emotion subject to will power. Hysterical people are to be cured as are other cases through the removal of exciting causes, and not by denunciation of the forms of their excitement. This paper shows this form of analysis and it also shows how many of the symptoms have been removed. Fortunately the cause of inoperable fibroid did not hinder the palliative and curative action of galvanism and remedies. The effect as concerns the patient is all the more pleasing as her training had been that she was doomed to an incurable catalepsy; whenever there was a possible chance for a paroxysm she would probably have one and go on to her destruction, or the growth of the fibroid would end her days. At the present time both of these calamities have been averted, and for months she has had what she did not expect to have, a comfortable life.

Zincum val. is an old remedy, but I am glad to have it revived in my memory for it has always been a useful drug with me, but because displaced by codeine and the coal tar derivatives. The latter to my mind have not been of promised success in neurotic cases.

Dr. HALBERT: In regard to Dr. Clapp's second case I would simply say that it seems to me more like one of hysterical character—probably hystero-epilepsy. As the local conditions were relieved the hysterical symptoms disappeared and this we will find in all of those cases. I sincerely hope that some day the profession will become educated to the idea that hysteria is truly a disease and not

continue to confound it with mere hysterical manifestations. I believe it to be due to a protoplasmic weakness of nerve cells showing a loss of inhibitory power in the brain, and excessive cell excitement in the cord. It is always associated with a volitional debility.

Dr. CLAPP: I quite agree with Dr. Ludlam that the patient with the fibroid suffers from a form of hysteria rather than from catalepsy. For in catalepsy there is a loss of consciousness, and this patient has never been unconscious. One small powder of the zinc. val. 3 will insure for her a night's rest. I have but little fear in prescribing it.

XLV. THREE CASES OF CHOREA WITH CLINICAL OBSERVATIONS. BY DR. H. V. HALBERT.—*Case. 1. Abdominal chorea. Agaracine.* George J., age twenty-seven, had always been a robust and healthy man; no serious disease had ever afflicted him, and he absolutely denied specific infection. His work was in the slaughter house at the Stock Yards, and the exacting strain and excitement of killing pigs had undoubtedly been a prominent factor in the disturbance of his nervous system. When he came to my clinic, about six months ago, he showed all the signs of neurasthenic weakness. The reflexes were debilitated and the conjunctival reaction was lost; there was some cord in coördination, and he was troubled at times with severe attacks of singultus. His chief annoyance, however, was the constant contraction of the abdominal muscles. This was so extreme that, during the daytime, he did not have one moment of relief from this horrible spasm. No pain attended it, but the spastic condition increased until his whole body jerked severely with every contraction of the abdominal muscles. In about two months a facial twitching appeared which involved the region of the eyes mostly. The patient had made the round of old school clinics without any relief, and as usual, had come to the homœopathic school as the last resort. In taking his symptoms it was observed that he began to complain of a tendency to paralysis of the arms and limbs; not that there was any real loss of power, but he constantly experienced a peculiar feeling which made him fear paralysis; along with this there was an experience of general tremor which affected the whole body alike, giv-

ing almost the appearance of paralysis agitans. Then, too, the muscular twitchings of the abdomen were very violent and decidedly involuntary. All of these symptoms ceased during sleep and under a hypnotic. He had been given bromides to the highest degree but without other results than the gradual dethronement of his mental faculty.

My diagnosis was abdominal chorea, though this was not in accordance with the accepted nomenclature of the disease. However, as the abdominal muscles were firstly and mostly involved, and as it was purely choreic in character, the term will surely stand for the condition.

The symptomatology was in the main so indicative of agaracus that he was given that remedy, in the third potency, for some time. This remedy has such a decided action upon the alimentary canal that for a time he suffered with intermittent attacks of gastralgia, causing the suspension of the remedy. The choreic twitching, however, improved quite decidedly until it seemed to refuse any further progress. I therefore, decided to try Dr. Bartlett's suggestion to substitute agaracine 1x, in smaller and less frequent doses. He took this remedy four times daily, and in a few weeks a decided improvement was manifest. In two months the abdominal contractions had ceased entirely. There remained, however, a pronounced twitching in the infra-orbital region. For this hyosycamus 3x was given for a few weeks without result; then the 30x was substituted and he gradually improved. In two more months he was pronounced cured.

We learn from this case the value of agaracus (better agaracine), not only in the functional disturbance of the alimentary canal, but in the involvement of the abdominal muscles as well. This shows its influence upon the spinal nerves supplying the abdominal region as well as the sympathetic distribution to the involuntary muscular fibres.

Case 2. Chorea, with a history of rheumatism. Actea Racemosa. Maud G., age 15, was under my private observation for more than a year. Her choreic habits were

somewhat peculiar inasmuch as they were periodic and associated with rheumatism. More than this, the spastic actions were much like the intentional tremor of multiple sclerosis. No decided twitching would be recognized until she started to make some motion, then a sudden jerk would pervert the intention of the motion; this seemed to pertain to any voluntary action, and it became so excessive that she could hardly perform any duty, and she walked and even talked with difficulty. She was anæmic, her menstrual function was irregular and scanty, the first flow having appeared one year before; arthritic pains were quite constant, and she had once been afflicted with acute inflammatory rheumatism. Her history was not favorable inasmuch as rheumatism seemed to be a family heirloom. The physician who referred her to me claimed there was a previous condition of endocarditis, though I could not observe any definite lesion of the kind. She had several attacks resembling intermittent fever with a periodic tendency to chill. The blood examination and the urinalyses showed signs of uric acid diathesis, and for that reason she was given quite heroic doses of china arsenicum with an occasional dose of natrum mur in potency. After a time the rheumatic features disappeared and the anæmia as well. She still suffered at the period and her family physician insisted upon the dilatation of the cervix; this gave some relief but did not cure and the chorea still persisted. I finally gave her actea racemosa, in various potencies, for two months. This seemed to be the last link in the chain of her physical fortune, for she began to mend rapidly and is now physically strong and troubled with very little chorea.

This is only one of the many examples showing the relation of chorea to rheumatism. While the pathological proof is somewhat wanting, it will pay us to make careful observation in this line. Without doubt it is an associate cause in a good majority of cases. If then we find endocarditis also as an attendant condition, we may more willingly accept the theory of cortex inflammation, with the result of embolic stoppage. At any rate it is quite plausible to believe that an anæmic condition of brain or cord cells will tolerate a spastic habit like chorea.

Another interesting point in this case is the relation of the chorea to the menstrual imperfection. This in reality was

the condition which had to be cured in order to reach the chorea, and it was not done by local treatment alone. The actea racemosa was clearly indicated and this did the work. But this was not accomplished until the uric acid disappeared as a factor of irritation, and therefore we must realize that it is not always possible to begin with the remedy which is to cure the case.

Case 3. Hysterical chorea. I would like to report briefly one more case which relates more to the common variety of choreic conditions. It is a question whether the term hysterical properly applies, and yet as it is purely a nervous affliction having no other organic cause, and inasmuch as the symptoms are of that nature, it seems quite right to give it that appellation. The case is that of a boy fourteen years of age, with a family history pointing clearly to the neurasthenic inheritance. The examination revealed many features of the degenerate character; the boy was not well developed, and there were some signs of cranial asymetry. His temperament was nervo-sanguine, and his mental activity, while not perfect, was in excess of the physical development. There were signs of disseminated anæsthesia in the upper extremity, while the general physical senses were hyperæsthetic; there were no definite expressions of contraction though the muscular function at times was quite spastic, the volition was not steady and the emotional temperament was exaggerated. As for the choreic jerks, they might be properly termed continuous and regular—they were systematic and did not vary at any time. In fact, he presented each week no new symptoms, and the tremors almost amounted to a persistent shake. He seemed as if under a peculiar toxic influence and had no control of himself.

Tarantula 3x was given to him for four to six months. At first there were signs of aggravation, and sac. lac. was introduced to give him rest; then the remedy was given intermittently for several months. He is now quite well and no other remedy has been administered.

We learn from this that tarantula is valuable, not only in a low potency, but as a depressant to high nervous stimulation. The weakness of hysterical conditions comes from protoplasmic exhaustion, and in such states the nerve fibre permits excessive innervation from the constant irri-

tability of the cell. This is similar to the nervous excitability of weakness, and while the innervation is not natural, it is constant. In other words, it resembles a toxic excitement which is not sufficient to produce paralysis of nerve function. In such cases the choreic movements are more gradual and the twitching is more like a general tremor. It does not affect any one group of muscles but seems to excite all. Much doubt has often been expressed as to the value of tarantula in such cases. My experience teaches me that it is one of our best remedies, and I use it with the greatest satisfaction in many cases and in a low potency.

XLVI. Epileptiform seizures from local irritation. By Dr. A. L. Blackwood.—My observation leads me to the belief that epilepsy is more frequently of reflex origin than the profession has acknowledged. Reynolds disputed such a cause of epilepsy, claiming that it was always of central origin; but the literature to-day is sufficient to prove that in patients with a neuropathic predisposition a slight irritation has produced these seizures. Cases in which an adherent prepuce has been the exciting cause are numerous, and the same is true of the clitoris. The relief of patient when a condition of intestinal indigestion has been corrected, or the oxyuris vermicularis been destroyed, bears evidence that they are frequently the exciting cause. Dr. Stevens has called our attention to heterophoria in this connection, and by a series of clinical cases has established his point. The treatment of diseases of the external and middle ear, the auditory nerve, and the stump of the optic nerve has cured other cases. Brubaker reports eighteen cases dependent upon caries of the teeth. Authentic cases due to gall stones and stone in the bladder are recorded.

Prof. Ludlam, in his excellent work on the "Diseases of Women," has called our attention to "menstrual epilepsy" and in the same connection epilepsy from ovarian irritation, uterine and rectal diseases, coitus, etc. Each of these

causes have their quota of cases, and the best evidence in this connection is where an operation for the relief of the injured nerve following traumatism has been the means of curing epilepsy. We have all seen cases in which depressed fractures of the cranium, exostosis, meningeal thickening and gummata have been the exciting causes. Recently a case has come under my observation which I believe belongs to this class, and at least to me it was unique.

Case. Mrs. B., aged twenty-eight, married ten years, mother of four children, the youngest three years old. While visiting her sister in Chicago she was taken with a severe convulsion, for which I was called to treat her. As a child she had no sickness except the diseases incident to childhood with an occasional headache. No history of convulsions of any form could be obtained. Her health was good until after birth of last child, when she began to grow irritable and nervous, with an occasional convulsion, which came more frequently until she had two or three each week. Having had an operation on the cervix about one year ago which relieved some of the local symptoms at the time, a thorough physical examination revealed but little abnormal with the exception of an ingrowing toe-nail on the big toe of the right foot. She said it annoyed her before the convulsions appeared, and the least touch about the inflamed mass appeared to render her very nervous and to affect her whole body. I removed the offending portion of the nail, the relief being greater than was anticipated.

There was one slight seizure afterward, but none since. She is still under my observation and continues to improve. This case had been diagnosed epilepsy, and I believe it was.

My belief based on experience and reading is, that many of these cases should be treated not with antispasmodics but by a search for and a relief of local irritation.

XLVII. THE NEUROTIC CONDITIONS INCIDENT TO UTERINE FIBROMATA. By DR. R. LUDLAM, JR., CHICAGO.

It is fitting and appropriate that the report of the Section on the Diseases of the Nervous System which is set for this evening should include a contribution from the

department of gynæcology; and while the subject that I have chosen is neither new nor strange, its study may be of service both to the specialist and to the general practitioner.

My attention was especially called to the neurotic conditions that often exist with uterine tumors while in Apostoli's clinic, in Paris, of which I was a regular attendant during the entire winter of 1886-87. I have now enjoyed the special resources of the foreign hospitals, of the Surgical Clinic for the Diseases of Women in the Hahnemann College and Hospital, of Chicago, as well as of the private consultation practice of my father; and what I have to offer in this paper is therefore based upon close clinical experience and observation for a period of fourteen years.

While it is true that many women carry these tumors for a long time without knowing it, and without suffering such local or general symptoms as necessitate special treatment, a large share of them do not escape. Certain predisposing causes have their influence in this matter. Those of a nervous and irritable temperament are predisposed to conditions that are excited by the presence of these tumors, whether they be large or small. A good illustration of this influence is found in the case of negro women, who as a rule are so good natured and easy going, not to say stolid, as almost never to be nervous under these conditions; while women of the better educated and more cultivated classes, with a highly sensitive organization, are much more likely to become nervous in consequence of carrying such tumors.

The active period of sexual life, pregnancy, and the climacteric, belong to the same class of causes. The menorrhagia, the leucorrhœal and the watery discharges from which most women who have interstitial and intra-uterine fibroids suffer, so drain away the strength of the patient as to make her a more easy and certain victim to neurotic disorders. Thus it not unfrequently happens that attacks of hysteria, epilepsy, and even catalepsy, result from the rapid and excessive depletion that occurs at the monthly period.

Sometimes a predisposition to sympathetic affections of this sort is acquired. It does not follow that because a woman with uterine fibromata has escaped these consequences for months or years therefore she will always be exempt from them. Whatever impairs her general health or lowers her vital resistance may start a train of morbid

symptoms that are especially prone to involve the nervous system. The different forms of metritis and peritonitis that may occur during the progress of these growths, and the development of syphilitic infection may also act in this way. The constant nagging by a tumor and its irritating effect upon the adjacent organs may finally worry her into a state of mind and body that is inevitable. Under these circumstances there is a very prevalent tendency, as there always is among women at the approach of the climacteric, to drop into a habit of tippling, or of taking alcohol or opiates in some form, which, while it affords temporary relief for the discomfort, greatly increases the tendency to the oncoming neuropathic condition. Even the rate of growth of the tumor, or the chronometry of the myoma, may have its effect. Up to a certain period the slow-growing, round, white, hard fibroid creates a toleration for its presence; but farther on, when it begins to degenerate, becomes anchored by peritoneal adhesions, or increases rapidly in size through becoming cystic or sarcomatous, a neurotic involvement is a certain and almost necessary consequence. This acquired predisposition to secondary nervous troubles is what usually sends the patient to the doctor, who may or may not locate the source of the mischief.

The exciting causes of these nervous epiphenomena are chiefly physical or mechanical and depend upon the location of the neoplasm, its age, its condition of degeneration, and its relation to the neighboring organs. If the tumor presses upon the ovary or the bladder it may excite some very painful and troublesome nervous symptoms, even although it is a small one. When it has become large enough to be impacted within the pelvis and to press upon the sacral nerves; when from being intraligamentous it cannot ascend above the superior strait; or when it arises above that strait and rests upon the psoas muscle, so as to compress the crural nerve; when it presses upon the ureters, so as to impede the flow of the urine, or to induce uræmia; to impair the action of the bowels; or seriously to involve the function of digestion, certain reflex symptoms, including a possible paralysis, are sure to be complained of. These old growths are always accompanied by a more or less recurrent peritonitis with effusion, and resulting bands of adhesions that bind the tumor and interfere with the mobility that is characteristic of them while small and undeveloped. Hence many patients com-

plain of inability to lie in certain positions because of the dragging pains, the tenesmus of the bladder or of the rectum, lumbo-abdominal neuralgia, and other pressure-symptoms to which they were not accustomed in the early history of the case.

The clinical value of the neurotic symptoms that attend upon these uterine neoplasms is significant. Those symptoms are not such nerve counterfeits of uterine or ovarian disease as are so often met with in functional disorders of a hysterical kind. They are the consequence of a palpable lesion, which is the morbid growth; and unless the patient is of a decidedly hysterical temperament, must always be symptomatic. They are more pronounced in groups, affecting either the brain, the heart, the stomach, or the kidneys.

The cerebral involvement is shown in a depression of spirits, gloomy apprehension, worry over present conditions and prospects, irritability of temper, a reversal of the finer feelings, and in the milder phases of insanity. The more prominent the social position of the patient the greater the mental strain and worry and the alarm and desperation. The interference of kind-hearted, but mischievous friends who have recommended this or that form of treatment, and especially of those who have a mania for decrying all kinds of surgical interference, often developes a pitiable state of affairs. Obstruction of the rectum and a resulting copræmia; or the shutting off of one or both the ureters, with a consequent uræmia, may add to the mental suffering and confusion. Neurasthenia from exhaustion of nerve force, or nerve-leakage, undermines the will power, and the poor victim is a more easy prey to these secondary influences. For if "the inflammations of fibroids are diseases of a disease,"* the neuroses of fibroids are the neuroses of a disease.

The woman who carries a large uterine fibro-myoma such as we have described, shows such changes of character as we often see. She is sad without knowing why; she often cries without good reason, she is weary and discouraged at every turn. To this emotional state there is added frequent impatience, or a permanent irritability. The slightest emotions are followed by crises of tears, and sometimes by a trembling of the whole body. The face reflects both weakness and apprehension. While this condition is not characteristic it contrasts strangely with the

*Clinical Lectures on the Diseases of Women. By J. Matthews Duncan, London, A. M., M. D., fourth edition, p. 333.

plumpness (*embonpoint*), the robust and ruddy aspect, and the fresh tint of most of these patients. If we insist upon these apparently trivial symptoms it is because they are possessed of a real importance. Taken singly their value is slight, but in their totality they give an idea of the life of suffering that these women lead. We must, however, analyze them in order to find their true significance.†

The functional neuroses induced by a pressure that impedes the thoracic and abdominal respiration are sometimes very distressing. On moving from side to side, or from the rolling over of the tumor, the shock may cause fainting, or a dangerous collapse. Nervous palpitation, suffocation and dyspnœa, on lying down especially, paroxysmal tachycardia, bradycardia, and paulocardia (when complicated with gastric neurasthenia), are not infrequent. Neither is angina pectoris a very rare result of the tumor-pressure which not only modifies the cardiac innervation, but may finally cripple the heart-muscle itself most seriously. All experienced operators know the danger of sudden death from heart conditions, such as fatty degeneration and brown atrophy, after the removal of very large fibro-myomatous, or fibro-cystic tumors of the uterus.

There is almost always present an insensibility of the pharynx such as occurs in hysteria, or as may follow the use of the bromide of potassium, or an attack of diphtheria. This symptom may be accompanied by conjunctival anæsthesia, a narrowing of the visual field, and the usual hysterical outfit; showing that the symptomatic conditions are decidedly neurotic.

Gastric symptoms analagous to those of early pregnancy are the rule and not the exception. Some of these patients suffer as from an inveterate and chronic form of "morning sickness." Neurasthenia with gastric involvement, atonic dyspepsia, gastralgia, gastrodynia, gnawing pains, the regurgitation of food, persistant vomiting, enormous development and eructation of gas, anorexia nervosa, and all sorts of caprices of appetite attend upon some of these cases, and yet the patient almost always remains plump and looks hearty. Despite these alimentary drawbacks, if the abdominal incision is made it must pass through from one to three or four inches of adipose; but the fatty deposit is generously distributed over the whole body and the extremities, a fact that does not harmonize

†*Des troubles nerveux liés à l'évolution des gros fibro-myomes utérins. Par A. Guépin. La Tribune Médicale*, Paris, 1892.

with the functional disorder of the stomach, nor does it exist in the case of any other kind of abdominal tumor.

When the pressure upon the ureters results in a partial or complete arrest of the flow of urine the nervous symptoms that arise are very analagous to those which accompany old cases of carcinoma of the uterine cervix. Dilatation of the ureters, damming up of the urine in the pelvis of the kidney, hydronephrosis, and the resorption of such of its elements as are poisonous to the nerve centres, may induce the well-known symptoms of uræmia, even to the extent of coma and death. Renal inadequacy and dropsy from this cause are almost always accompanied by inveterate neuralgia, headache, amaurosis, and the usual forms of mental obliquity.

As with certain uterine displacements, there is a nagging and more or less frequent and irresistible desire to urinate, especially during the day. This cannot be a pressure-symptom merely, else it would not be relieved and controlled by internal remedies, electricity, etc., as happens with the incidental dyspnœa, dyspepsia, tympanites and constipation; nor would the nerves and vessels of the lower pelvis escape involvement in so many cases in which the call to urinate is very distressing.

It may happen that functional disorders of the kidney which are not dependent upon pressure, either directly or indirectly, shall be accompanied by a dyspeptic albuminuria which is paroxysmal without the presence of tube-casts, the urine containing only a slight quantity of indican with some crystals of the oxalate of lime. As in other cases, however, this condition is neurotic and not necessarily serious.

Either as cause or effect the clinical relation of tympanites to the nervous system is well known. As incident to the existence of large or multiple fibroids within the abdomen, we can surely testify that it is not only a frequent but also a very distressing symptom.

Another important sign upon which we should insist is the meteorism of the abdomen. It is almost never lacking, and is frequently so pronounced that the patients do not forget it. Although it appears irregularly, it shows a preference for the days that precede the menstrual flow. Its duration is equally variable. It is partly masked by the dullness that is caused by the uterine tumor. If while it is present we palpate the abdomen, and with two fingers within the vagina fix the tumor, the fibro myoma appears to be larger and softer, whilst with the percussion alone it seems to be smaller than it really is. In fact,

whether the woman is lying or sitting, the coils of intestine often lie between the abdominal wall and the margin of the tumor. The greatly distended abdomen is not easy to palpate, and besides, its wall is often surcharged with fat and is therefore very thick. If we examine the patient when the tympanites has disappeared we find the parietes relaxed and the tumor easily outlined, and more solid and smaller. Therefore if any treatment whatever has begun, we must not hastily conclude that the growth has already lessened in consequence.

The size of the fibro-myoma should always be carefully noted. And, although it is imperfect, there is a simple method which is sufficiently exact, and which consists in carefully noting the distance between the umbilical cicatrix and the upper margin of the tumor. Then the patient is to take exactly the same decubitus, although contrary to what one would at first suppose, the position of the subject causes the height of the tumor to vary but a very little. Often, after having palpated the abdomen with the patient in a lying posture while two fingers were in the vagina in contact with the fibroid, we have caused her to sit down and the tumor did not descend in the least into the pelvis. Several of these patients who have been through a long and regular course of treatment have said to us: "I believe that my abdomen has diminished in size because my clothes, which once were too tight, are now too large in the waist; but my tumor has not gone down, for it even seems higher than it was before." Other very intelligent women think so, even after hearing the doctor say that the upper margin of the tumor was this or that distance from the umbilicus. This is, therefore, a certain method of knowing the relative increase or decrease in the size of the growth. For the fact that the clothing is too large or too small depends upon the presence or the absence of the tympanites, and it will not do to rely upon the mere say-so of the patient. (Guépin.)

Other peculiarities that should be noted in this connection are the following: While the nervous symptoms may not be present in the early history of such cases, and are sometimes lacking throughout their course, they are pretty sure to be developed and to increase in severity as time passes. Nor do they always end with the disappearance of the tumor, whether it vanishes spontaneously or is removed by a successful operation. The menopause may be delayed or go by default, and so long as the tumor remains the nervous symptoms may become more and more pronounced. Hence the folly of promising that if the patient reaches a certain age her sufferings will cease by a natural limitation. Paraplegia and a form of phlegmasia dolens may result from the pressure of an impacted fibroid within the lower pelvis. The relaxation and liberation of certain peritoneal adhesions because of the growth of the

tumor, or a change of its position, may give freedom from painful, dragging sensations that have made the patient very nervous and caused a lot of troublesome reflex symptoms.

It is therefore evident, I think, that the most prominent subjective symptoms of uterine fibroids, which vary in different cases, are of a distinctly nervous type. Not only are the pathological conditions as stated, but there is therapeutical proof that affords the strongest confirmation of this theory. Apart from the risks of local congestion and inflammation, of septic involvement, and of serious hæmorrhage that are met and controlled by ordinary measures, all that has ever been accomplished by medicines, resolvents, dilatation (Atlee), hygiene, massage and electricity is the *symptomatic* relief and cure of some, but not of all kinds of these neoplasms. The neuropathic condition has often been remedied—and that is a great deal; but, thus far, there is no valid evidence that the radical cure and complete disappearance of these tumors can be effected by anything but prompt and careful aseptic surgery. The expectant and palliative method (for it is nothing more) may be best and sufficient so long as the neurotic symptoms predominate and can be controlled, and so long as there are no signs of local disorganization, præoperative sepsis, cardiac failure, renal inadequacy, or a serious break-down of the general health; but when these latter symptoms are present it will not answer the purpose.

Remembering that the drift of the soft and œdematous myomata and of fibro-cystic tumors of the uterus always is from bad to worse, it is evident that the incidental neurotic symptoms which accompany them do not and cannot furnish the proper indications for their treatment. And bearing in mind also the correlative fact that many authentic cases have been reported in which other forms of uterine fibroids have disappeared of themselves, without any treatment, we should be chary of claiming that we have actually disposed of them by any other means than by their extirpation.

XLVIII. EYE-STRAIN, WITH PECULIAR REFLEX SYMPTOMS. By DR. R. ARNOLD, OF MANISTEE, MICH.—Dr. C. J. Swan's paper on the report of the Section on the Diseases of the Eye and Ear (page 414) reminds me of a case that I wish to cite in corroboration of his remarks.

Case. R. W., aged 18 years, consulted me in March, 1896, and said he had had an attack of inflammation of the bowels about four years before, and since that time had great difficulty in controlling the stools, and would immediately have diarrhœa after receiving an invitation to attend a party, and if he did attend, the condition was aggravated; also in school which made him very miserable. I examined the rectum which I found slightly fissured and very much congested. I also examined his eyes and found some astigmatism, and intended to correct it, but he improved so much that I did not do so at that time. He told me that he invariably gained in health and weight during his vacation, and the rest really gave him temporary relief. He returned to school at the beginning of the school year and had a relapse of the bowel trouble. He then became so thin and pale that I believed it possible the eye-strain was largely responsible for his condition, and advised him to let me test his vision, which he did. I found compound hypermetropic astigmatism and ordered correcting glasses for the same. The glasses have given him entire relief from the inability to control the bowels, although he attended parties frequently and was able to continue through the school year and rapidly regained his health. He also reported he seemed to have less difficulty in committing his lessons to memory. This case demonstrates the importance of taking the history and correcting reflex irritation.

Editorial.

THE ANTAGONISTIC ACTION OF THE ALKALOIDS.—Excellent chemist as he was, and always progressive, it would have gladdened the heart of Hahnemann if he could have known what is being done in these *fin de siècle* days in the way of a more intimate analysis of drug action. For not only has it become possible to separate the active principle, or principles, from the worthless portion of a drug, so that the resources of the materia medica may be increased and purified, but the mutual action and reaction of these component principles are being investigated and utilized as they never were before.

Until recently nobody supposed that a drug which contains two alkaloids represents two antagonistic principles which, like the flexors and the extensors of one's fingers that make the hand worth having, may and do counterbalance and regulate each other in their physiological action. Neither did any one imagine that a considerable share of the ptomaines, and perhaps all of them, could possibly be both poisonous and prophylactic, causative and curative. This is the current lesson of experimental therapeutics.

We do not fully appreciate the safeguard with which in this way Nature has protected those who otherwise would have been the victims of overdosing. When crude drugs have been given with little perception, or concern, about their noxious qualities the antidote has been unwittingly swallowed with the bane, and by its antagonistic action has often saved the life of the patient. It would not be strange if this protective principle should yet be recognized as the phagocyte of the old-school pharmacy.

If a drug that contains two or more alkaloids may lose its identity on being introduced into the organism, because its elements are in conflict with each other; if those elements may act singly and differently; and if neither of them represents all the good qualities of the drug, why should

we not first separate them in the laboratory and afterward prove, and study, and prescribe them as if they were individual remedies?

While we continue to use attenuations of the entire drug in expectation of definite results there is no logical or sensible excuse for opposing the occasional alternation of our remedies. For if one dose of a single remedy may contain a dozen different principles more or less, we are not dealing with simples but with conflicting compounds, which is equivalent to putting so many ingredients in one prescription, or to alternating different remedies at given intervals.

SULPHURIC ETHER IN THE TREATMENT OF MUSHROOM POISONING.—In a report of the death of three children in one family from having eaten poisonous mushrooms or toadstools, contained in the *Medical Record* for August 28, no mention is made of the value of sulphuric ether as a remedy in such cases. As long ago as October, 1880, we published our first case of the kind in this journal.* Whoever has failed to read that report (and there must be a few clever doctors East and West who have not seen it), may be interested in the reprint of its essential facts, as well as in learning that the merit of this treatment in such an emergency has been confirmed by others. The ether may not answer in every case, but that it is an available and invaluable expedient is beyond question.

Case. Mr.——, a well-known merchant of this city, about thirty-five years of age, in good general health, hearty and active, ate freely of mushrooms at a down-town dinner at 1 P. M. He had never felt better than on the morning of the same day, nor did he feel anything unpleasant after dinner until 4 o'clock, when he was suddenly seized with vomiting and purging. The attack was painless, but was accompanied by a feeling of sea-sickness, as if he were walking in the air, the same that he had had on shipboard.

Within an hour and a half the operations were repeated five times, and, those about him becoming frightened, he was taken home in his carriage. On the way the nausea and vomiting were very much aggravated. Arrived at home, every fit of vomiting was followed immediately by copious purging. There was an irresistible craving for cold water, which caused vomiting as soon as it was swallowed. The stools were

*THE CLINIQUE, Vol. I., 1880, page 340.

large and watery, like those of cholerine, and after them there was a disposition to faint, although he had never fainted before.

At 6:30 P. M. he began to have cramps in the toes and feet, and was forced to spring out of bed and to stand upon them, so as to relieve the suffering. These cramps came in distinct paroxysms, and were repeated every five to fifteen minutes. They grew worse in degree, and extended to the legs below the knee, and afterward to the muscles of the thigh, and I can truly say that, since the year 1854 (when we had the cholera so badly in Chicago), I have never seen a patient suffer as this one did from the cramps.

With the extension of the cramps, there came a feeling of paralysis of the lower part of the face, a locking of the jaws, and a sensation "as if a bag were drawn from the chin upward over the face as high as the ears, and over the ears." At that time, he now says that he felt "as if so much of the head as was covered by this bag had been submerged in water." These peculiar sensations finally came with the cramps, and were followed by deafness and a fainting fit.

The sensation in the ears was "as if the nose and mouth were being held, and one should attempt to blow forcibly so as to distend the drum of the ear, and make it feel as if it would burst."

There were no mental symptoms, the mind being perfectly clear and rational. The unconsciousness of the fit continued but a very few moments. He was calm, collected and plucky, and, until the cramps had reached the face, was even jocose at times. There was no coldness of the surface and no fever. At 9 P. M. the pulse became thready, and finally imperceptible. There was a great desire for liquids, especially for cold water.

Treatment. Realizing that he was in extreme need of something that would relieve his suffering, and at the same time act as a diffusible stimulus, I determined to try the effects of sulphuric ether. Half a teaspoonful of the ether was put into half a glass of water, and a teaspoonful of the mixture given every five minutes for three or four times. The pulse became perceptible, and the cramps were toned down a little. The change was sufficient to satisfy me that the free use of ether would be of service. I accordingly gave it by inhalation, with the return of each paroxysm, as we use it in labor. It had to be repeated very carefully for more than an hour before the cramps ceased, but he slept a little occasionally. After midnight, he rested pretty well until 6 o'clock in the morning, when he had another pretty severe paroxysm of cramping in the legs, which was literally snuffed out with the ether. He was kept in the house for some days, on a simple diet, and, although the effects of the poisoning passed off slowly, he made a good recovery.

There were six other men who ate of the same mushrooms at the same restaurant on the same day. All of them were ill in consequence, and some of them dangerously so. One of the colored waiters in the

establishment took a pound of these mushrooms home, and has not been heard from since.

CHIRURGOPHOBIA.—Although some of the newer and more strictly scientific branches of medicine are in need of a verbifuge for the excessive use of technical words, there are certain subjects allied to our art that are in need of new terms for clearness and convenience of expression. The growing dread and horror of extreme surgical methods that spreads and extends in inverse ratio with their safety when properly applied, has no word to represent it. That condition, prejudice, prevalent idea, mania, or whatever it may be, is a modern one, and writers and teachers especially should have a word that expresses it directly and satisfactorily. While a frugality of epithets is even more commendable with the learned than with the ignorant, and while one should not presume to do such a thing without sufficient reason and justification, we venture to propose the word *chirurgophobia* as suited to express the mortal dread that thousands of people have acquired for the excesses and abuses of modern surgery.

Hospital Notes.

THE CHILDREN'S CLINIC.

SERVICE OF PROF. JOS. P. COBB.

RHACHITIS.—*Cases 1,218 and 1,219.* These two children, Leopold and Marie, were placed in the children's ward February 7, 1896. They are three and one-half and two years respectively, and exhibit many pronounced rhachitic conditions. Their mother died seven weeks ago, of septicæmia following childbirth; the baby born at that time is living and doing fairly well we are told. An older brother æt. nine years has always been well.

The father is well, and has tried to look after the children and work at the same time since the death of their mother. He has been in the habit of tying them into their chairs and leaving them the greater part of the day alone.

At present they are poorly nourished, nervous, easily frightened and poor sleepers. They have the habit of sleeping in a sitting position with their heads resting forward on their hands or knees, due to their confinement. Leo, who is three and one-half years old, can stand if placed upon his feet, but makes no effort to walk; every time he is placed upon his feet he urinates.

When six months of age he began to have spasms, which continued at longer and shorter intervals for eighteen months. His head is large and box-shaped, with bossa and a prominent forehead; the distal ends of the radii, tibiæ and humeri are enlarged; the "*rickety rosary*" is marked; the abdomen large and protuberant; the chest poorly developed at the upper part; the liver is large and displaced downward; there is no appreciable enlargement of the spleen; he does not talk at all; his bowels move nine or ten times daily.

Mamie, æt. two years, cannot stand at all; she has but seven teeth, and makes no attempt to talk. She shows the same marked osseous stigmata that her brother does. The muscles of her limbs are very poorly developed. She is very quiet and good natured. Her appetite is good.

These children remained in the hospital for nearly a

year. Special attention was given to their diet, which was gradually made more and more varied. In the beginning they were given a liberal amount of good milk and cream, with some cereal foods. Fruits (fresh) were early introduced into their dietary and given freely; eggs were also made a part of their daily food, and bacon occasionally. After a short time they were taught to try to walk; and while they were very slow in acquiring the art, they both learned to travel pretty fast before the year was out.

In learning to talk and to walk, and in general health the younger child improved much faster than the older one. This I attribute to the fact that the deprivations and unhygienic surroundings had for a longer time been influencing the old child, and he had passed by a longer interval the normal time for the acquirement of these arts.

In the way of medication they were given most of the time one of the calcarea salts or phosphorus, but in addition for several months were regularly administered with proto-nuclein; their improvement and general development was much faster than we ordinarily expect in such marked cases or rhachitis. We have used the proto-nuclein in a large number of rhachitic and tuberculous children, often without any other medication, and are satisfied that it is a valuable remedy for stimulating the desired vegetative changes.

In these cases we attributed the imperfect development to poor health on the part of the mother, frequent gestation, unhygienic surroundings, improper and insufficient diet for both mother and children.

RHACHITIS OF A MILD TYPE—*Case 1,436.* Edna, æt. eighteen months, reported at the Clinic Oct. 30. Family history not obtained. Has two brothers living æt. four and six years. One older than these died at 8 months of age. She was slow in cutting her teeth, none erupting until after she was 1 year old; now she has ten which have appeared irregularly.

She has not made any effort to walk, sleeps well, eats

everything at irregular hours, was nursed until she was seventeen months of age. The bowels are regular, the urine excoriating. She has always been pretty well until last summer when she had dyspeptic diarrhœa for two months, since which time she has not gained in flesh or strength. She is beginning to show some of the grosser rhachitic signs.

She was given phosphoric acid 6, and a diet suitable for her age and requirements was prescribed to be given at regular hours. She reported steady improvement, and Nov. 27 was making efforts to walk. A failure to erupt any teeth before the close of the first year is in itself good presumptive evidence of rhachitis; when accompanied by imperfect development, slowness in attempting to walk, loss of strength and muscle tone, and evidences of indigestion it is not necessary to wait for the gross bone lesions in order to make a diagnosis.

In this case we notice two conditions that were probable etiological factors, viz.: Frequently recurring gestation prior to conception of this child, and prolonged lactation with an improper diet improperly administered.

RHACHITIS WITH ECLAMPTIC SEIZURES.—*Case No. 1,496.* John, æt., six years, first appeared at our clinic December 18, 1896. The family history shows no data of special interest. He suffered with pertussis at one year of age; measles at two and chicken pox at three. When an infant he was fed by the bottle.

The shape of his head and chest are distinctly rhachitic; the distal ends of the radii are disproportionally large. He is fairly well nourished, but his flesh is soft and flabby.

The eclamptic seizures began about four months ago and occur usually in the daytime. He is restless and irritable preceding the seizure, cries out or screams with the onset, becomes unconscious, although his eyes are open, knows no one and has to be held down during the paroxysm. These attacks are recurring every few days. His appetite is good, he drinks a great deal of water; his abdomen is distended with gas, his bowels are regular in their evacuations.

He perspires very freely while sleeping, begins as soon as he goes to sleep. He grinds his teeth while sleeping

and is very restless, turning frequently. He was given crotalus hor. 6x.

January 8. He reported that he had but one attack; he is feeling better and sleeps more quietly. He is coughing some at night. ℞ continued.

January 29. There has been no return of the seizure, sleeps well, but still sweats at night. An eczematous eruption has appeared upon the ear.

He was given sulphur 30x. He continued to report weekly up to March 12, showing continued improvement. There has been no return of the seizure, but he still sweats some at night.

April 23. He has had parotitis since he was here last. There has been no return of the seizures until two weeks ago when he had a severe attack, this was followed a week ago by a less severe attack, otherwise he is pretty well. Crotalus 6.

Up to the present writing this boy has had no return of his seizures, and will probably succeed in outgrowing this pernicious attribute of rhachitis. Any infant may have one or more convulsive seizures without any grave results or special significance, but when they occur after the first year of life and especially when they continue on into the fourth, fifth or later years of life they are always connected with rhachitis.

The seizures in later years usually differ from infantile eclampsia and often simulate, as this does, epileptic seizures; they have the advantage, however, of yielding much more readily to treatment. The nervous, irritable disposition, restless sleep and profuse perspiration while asleep are often of rhachitic origin, and indeed may be the earliest heralds of the condition; if they are associated with hyperæsthesia of the skin and a dread of cold water baths they should always excite sufficient attention as to lead to a thorough investigation. We are unfortunate in being unable in this case to learn any very definite family history or accurate history of the child's earliest years. When we can, however, we usually find malnutrition before birth or during infancy, improper diet of child, unsanitary surroundings with lack of good air and sunshine, or prolonged overstrain, physical or mental, of one or both parents as prominent precursory conditions.

RHACHITIS.—*Case.* Ida, æt. three and one-half years (colored), was sent to the children's ward of the hospital from the Margaret Etter Créche, April 17, 1897. The family history gives the following data: Mother and father both well, no history of tuberculosis. She has two brothers and three sisters, all of whom are well and strong except the youngest who is fifteen months old; she shows something of the same rhachitic developments. Ida was nursed until she was eighteen months of age, and since then has been fed irregularly on an insufficient diet.

Physical examination reveals a sub-acute broncho pneumonia (double), a catarrhal inflammation of the nose, throat and trachea; nasal adenoid growths, enlarged cervical, axillary and inguinal glands, enlarged liver, epiphyses of long bones disproportionally large, flat head with large fontanelle. Sputum analysis negative for tuberculosis, but shows a large number of superficial epithelia from the bronchi and bronchioles.

Temperature 99⅘°, pulse 130; respiration 80. She suffers with a hard cough which comes in paroxysms and goes on to vomiting of mucus. There is a thick yellowish nasal discharge; the conjunctiva are inflamed, and there is a continuous watery discharge from the eyes. The bowels are loose, the movement frequent and offensive. The appetite is poor; she is very restless and a poor sleeper; she perspires profusely about the head especially when sleeping; makes no effort to walk and cannot stand alone.

She was given tartar emetic and phosphorus, three times daily of each. Her medicine was changed from time to time to suit her varying conditions. The record shows that at different times she has had arsenicum, phosphorus, tartar emet., ferrum phos. and calcarea phosphorica.

May 17. Temperature 99.4°, pulse 122, respiration 40. The bowels are regular; the cough is loose, no hard paroxysms of coughing; vomiting rare.

June 17. Temperature 99.2°, pulse 103, respiration 58. General improvement.

July 17. Temperature 98.8°, pulse 80, respiration 34. Marked improvement.

August 17. Temperature 100.6,° pulse 130, respiration 68. She has taken cold, and has not been as well for a few days. Her cough is more troublesome.

At the present time (September 7) she has nearly re-

turned to the condition she enjoyed prior to this last aggravation, and we propose to remove the adenoids from the naso-pharynx, as she is unable to breathe through the nose at all.

The cervical, axillary and inguinal glands have returned to their normal size; she talks quite easily; can stand, and tries to walk. She has gained in weight, and her flesh is acquiring a fairly good degree of firmness.

This child will probably outgrow all of the active rhachitic influences; but the changes of the osseous system, and especially those of the head and face, will always remain as signs of what has occurred.

We notice here that of these six children only the last two show this depraved condition; that this child was nursed for eighteen months, that her surroundings were unsanitary and her food insufficient. If you can have these children under your immediate care, as we do in the hospital, where diet, clothing, bathing and sunshine are considered of as much importance as medication, the great majority of them can be helped.

FOREIGN CORRESPONDENCE.

LONDON, August 25, 1897.

Mr. Editor:—I arrived in Paris in time to visit most of the prominent men in whom I was interested, before they left for their holiday.

No one of the European oculists pays so much attention to the ocular muscles as does Landolt, and we hear almost nothing of "insufficiencies," "weak muscles, etc." But Landolt has for years examined carefully all muscular errors and strives to correct them on scientific principles.

One of the commonest means for relieving an insufficiency is to weaken an opposing muscle. But Landolt, as a rule, I believe, prefers to strengthen the muscle by advancement. He even advances two muscles at the same time, one on each eye, and his results are good, for he keeps on till the eyes are balanced.

Galezowski is the same daring operator as ever and rarely does he fail in accomplishing what he undertakes. His clinique is one of the largest private ones in Paris, as he is now enrolling patients, the new ones alone numbering nearly a quarter of a million. One of the first to

take up the "simple" operation for cataract, (without iridectomy) he still makes it his rule, varying from it only when special cases demand an iridectomy. He used to open the capsule with the Graefe knife at the time of the initial incision, a brilliant piece of operating, but now follows the more common and usually safer plan of doing it with the cystotome. A new celluloid and elastic bandage is the only dressing, and patients are not even confined to their bed.

His idea as to the prevention of iris prolapse is that by making his corneal incision well forward and purely *corneal*, he is too far from the border for the accident easily to occur. Eserine is invariably used

One of his "hobbies" is that of the lachrymal canal. He seems to have proved to his own satisfaction that many external diseases and even those so often attributed, at least in America, to the muscles, under the term asthenopia, are purely secondary to lachrymal obstruction. One of his cases, to which he refers with some pride is that of the son of the Shah of Persia, who, treated by various European oculists, was still uncured and growing worse, till Dr. G. found and relieved the seemingly slight lachrymal obstruction, which had not been deemed worthy of note. His attention to the drainage is surely not without good results; he often extirpates entirely, the sac, if suppurating, before attempting to do a cataract operation, hoping thus to prevent infection

His ideas as to glaucoma are unique and his method of doing a sclerotomy for the same, though interesting, is beyond the scope of the present letter.

I am greatly indebted to Galezowski for many clinical points from a rich clinique as well as for personal and social favors.

DeWecker, Trousseau, Panos, Abadie and Meyer, each in their own good way, are deserving of more than a mention; and were this the place, should have their methods and results discussed.

I revisited Gougenheim in the throat department of Lariboisiere. Like Krause, of Berlin, he makes an attempt to radically cure local tubercular manifestations, and particularly of the pharynx and larynx He simply cuts out all diseased parts as soon as they are found, taking arytenoids, epiglottis, cartilage or cords, if they seem to be involved I cannot here refer to statistics but he claims good results and many permanent cures.

I had hoped to see Snellen in Utrecht, but found him already on his way to Moscow, with many others, for the International Congress. In London, although it is holiday time and many are away, yet out of the many ordinarily on duty, there are still more than enough to keep one busy with work.

Mr Nettleshipstill continues in his quiet unpretentious yet scientific way to do his best for the patients applying to him at the Royal London Ophthalmic Hospital. If any change has occurred, though I see little, it is toward conservatism He never attempts an operation to show his own

ability or method, but the patient's interests are alone considered. This cannot always be said of European operators. His present method of operating for cataract is the simplest I have seen. He uses no speculum, fixation forceps or assistance, but with knife, scissors and spoon, quickly and deftly performs the usual operation.

One of the greatest treats was the time spent at the London Homœopathic Hospital on Ormand street. Like our own it is new, and in many respects is not unlike the Hahnemann, of Chicago. Most probably because of more money, it is perhaps more completely equipped in some of the finer details, but like our own and most others, for that matter, is still in need of more.

I met some old friends there, Dr. Burford, Dr. Johnstone and others, and had the pleasure of seeing an afternoon of surgical work at the hands of Dr. Dudley Wright. Good judgment and careful work were in evidence, and the patients who entrust themselves to him may be assured of the best of care.

Very truly,

C. GURNEE FELLOWS.

ANGINA PECTORIS DUE TO TOBACCO.—Professor Potain points out (*Journal de Médecine de Paris*, Oct. 6, 1895) certain peculiarities enabling the physician to diagnose the angina pectoris caused by the excessive use of tobacco. In true angina pectoris from a coronary lesion, the attack is due to increased work of the heart; the pain is of a tearing, burning character, and is substernal. In tobacco angina the attack is spontaneous, without any effort on the part of the heart, and lasts several hours. The pain is often substernal, but also frequently præcordial; it is as intense as in true angina pectoris, but there is a feeling of dilatation. This rule, although not absolute, will be found to apply in the majority of cases, and it will also be observed that whereas in true angina pectoris the least movement will increase the attack, that due to tobacco is in nowise influenced by movement.

Clinical Reviews.

All books for review, magazines, exchanges, correspondence and articles designed for publication in this journal should henceforth be sent to Dr. R. Ludlam, Editor, 1823 Michigan Avenue, Chicago.

DR. R. H. GROSS' COMPARATIVE MATERIA MEDICA. EDITED BY CONSTANTINE HERING. Second edition. Philadelphia: Boericke & Tafel. 1897. 4vo, pp. 520.

This is a new edition of a big book that was first issued in the English language thirty years ago, and it comes to us with the face of an old friend. There is the same clear, convincing vigor in the contrasted indications that are given in parallel columns which we found so useful in the early days. Five hundred comparisons of one hundred of the most common remedies make a very useful book, to which is added a Pharmaceutical Key by Dr. Hering, and a most valuable Appendix, containing the collateral symptoms during stool, urination, menstruation and cough, by Dr. Conrad Wesselhoeft. Every physician in our school of medicine should possess himself of a copy, and then use it religiously. C. H. E.

A TEXT-BOOK ON THE DISEASES OF WOMEN. BY CHARLES B. PENROSE, M. D., etc., Professor of Gynecology in the University of Pennsylvania, etc. Illustrated. Philadelphia: W. B. Saunders, 925 Walnut Street. 1897. 8vo., pp. 529.

The multiplication of new works on gynecology makes it very difficult to estimate their value, not only because the science and art involved are constantly changing, but also because the subject is generally considered from a surgical and not from a medical point of view. Some of these publications are encumbered with too much literary baggage, others are too brief and assertive; some are too technical, as if written without the proper experience, and others have an ancient flavor that comes from certain chapters having been written only a very few years ago. The usual defects are compensated in this volume, which is certain to be acceptable and welcome because it is straightforward in its style and in every way practical and sensible. It really deserves a wide circulation not only among specialists but among our general practitioners as well.

Miscellaneous Items.

The XXXVIIIth annual course of instruction in the Hahnemann Medical College and Hospital, of Chicago, was opened last evening, September 14 with appropriate ceremonies. The large and newly equipped amphitheatre was filled with a crowd of students, preceptors and visiting friends and physicians. The programme was in charge of Prof. Halbert. Prof. Crawford gave a rousing and thoroughly loyal Address on Hahnemann and Homœopathy, and brief speeches were made by the Dean, Professor Vilas; the President and the Vice President, Hon. Erskine Phelps. Songs were interspersed as of old by the Quartette, and the exercises were followed by the Annual Reception, the inspection of the Hospital and a delightful social reunion. Everybody was happy and hopeful and there was not a pessimist in sight.

Professors Vilas, Shears, Gilman, Crawford and O. L. Smith have returned safely from their several vacations in season for the College opening, and are on duty again.——Ditto Professor C. Gurnee Fellows, whose third and last foreign letter appears at page 489.——The College of Physicians and Surgeons, of Chicago, has wisely opened its doors to women students.——Special attention is called to Professor Arnulphy's paper on "The Nervous Phase of Asthma," at page 450.——Professor G. Hardy Clark has removed to 338 57th St., city, from Humboldt, Ia., and entered upon his duties in the department of Materia Medica.——The Section on Surgery, Prof. Blackwood, Chairman, will report at the next meeting of the Clinical Society, September 25.——The Chicago *Courier* has our thanks for an excellent notice of the "Old Hahnemann," that closes as follows: "We are sure of rendering a signal service to any medical student desirous of taking a full

course of instruction in the progressive methods of healing the sick, by directing his attention to an institution that bears the mark of honesty, character, stability and progress."——Professors T. G. Comstock, of St. Louis, and J. H. McClelland, of Pittsburg, and Dr. F. D. Bittinger, of Dayton, Ohio, called upon the editor of the CLINIQUE recently.——Our friend, Dr. M. H. Parmellee (Hahnemann, 1870), of Toledo, Ohio, has resigned the Chair of Obstetrics and Gynæcology in the Homœopathic department of the University of Michigan.——A beautiful memorial tribute to the late Prof. W. A. Dunn has been issued in the form of a tasteful little volume of extracts, letters, etc., concerning his worth and our loss.—Dr. T. W. Ashley has *not* left River Falls, Wis., for the purpose of locating in Lawrence, Mich., but the following list of removals is believed to be correct: Dr. Jean Christie-Chandler, from Tacoma to "The Rookery," Spokane, Washington; Dr. W. H. Robilliard, from Arlington, Iowa, to Faribault, Minn.; Dr. J. Streubel, from 18 Wall St. to 495 Hart St., Brooklyn, N.Y.; Dr. J. J. Hinckley, from Keokuk, Iowa, to 6 Smith Terrace, Denver, Col.; Dr. A. A. Pompe, to Roslyn, Washington, and Dr. J. S. Barnard, to 2112 North Charles St., Baltimore.——The death of two more of our old-time professional friends is announced, that of Dr. Harvey Dale, Sr., of Oshkosh, Wis., and that of Dr. Charles Bojanus, of Russia, the good old man who was present at the International Homœopathic Congress, held in Chicago during the World's Columbian Exposition.——Dr. E. J. Abbott has taken Dr. Dunn's old office, 929 Marshall Field Building, city; Dr. R. Ludlam, Jr., has removed his office and residence to 2327 Michigan Avenue, city.